JC17 Rec'd PUT/PTO 09 JUN 2005

In the Claims

- 1. (Currently Amended) Method A method for producing a protein, the method comprising the steps of:
- (a) providing a nucleic acid sequence coding for the protein wherein the nucleic acid sequence coding for the protein comprises a translation start codon;
- (b) inserting in which a heterologous nucleic acid sequence is inserted on the 3' side of the translation start codon in the correct reading frame, wherein said heterologous nucleic acid sequence being selected such that forms a stem-loop structure is formed on the 3' side of the translation start codon at a distance of 6-30 nucleotides from the 3' side of the start codon;
 - (bc) providing an expression system suitable for expressing the protein; and
- (ed) introducing the nucleic acid sequence sequences combined in step (b)according to (a) into the expression system; and
- (e) according to (b) under conditions such that a forming the stem-loop structure is formed wherein the length of the stem is in the range of 4-12 nucleotides.
- 2. (Currently Amended) Method The method as claimed in claim 1 additionally further comprising the isolation of the step of isolating the protein.
- 3. (Currently Amended) Method The method as claimed in claim 1 or 2, eharacterized in that, wherein the inserted heterologous nucleic acid sequence has a length of up to 201 nucleotides.
- 4. (Currently Amended) Method The method as claimed in claim 3, eharacterized in that wherein the inserted heterologous nucleic acid sequence has a length of up to 45 nucleotides.
- 5. (Currently Amended) Method The method as claimed in one of the claims 1 to 4, characterized in that claim 1 wherein the stem-loop structure is formed at a distance of 12-21 nucleotides on from the 3' side of the start codon.
- 6. (Currently Amended) Method The method as claimed in one of the claims

 1 to 5, characterized in that claim 1 wherein the region of the heterologous nucleic acid

sequence that is on the 5' side of the stem-loop structure does not itself form a secondary structure and cannot form a secondary structure with the 5' untranslated region of the nucleic acid sequence coding for the protein to be produced.

- 7. (Currently Amended) Method The method as claimed in one of the claims 1 to 6, characterized in that claim 1 wherein the region of the heterologous nucleic acid sequence that is on the 5' side of the stem-loop structure and on the 3' side of the ATG start codon has a GC content of < less than 50 %.
- 8. (Currently Amended) Method The method as claimed in one of the claims 1 to 7, characterized in that claim 1 wherein an in vitro expression system is used.
- 9. (Currently Amended) Method The method as claimed in one of the claims 1 to 8, characterized in that claim 8 wherein a prokaryotic the in vitro expression system is a prokaryotic in vitro expression system used.
- 10. (Currently Amended) Method The method as claimed in claim 9, characterized in that wherein the prokaryotic in vitro expression system comprises a lysatelysates of gram-negative bacteria, in particular of Escherichia coli of gram-positive bacteria, in particular of or of Bacillus subtilis.
- 11. (Currently Amended) Method The method as claimed in claim 8, characterized in that wherein a cukaryotic the in vitro expression system is a cukaryotic in vitro expression system used.
- 12. (Currently Amended) Method The method as claimed in claim 11; eharacterized in that wherein the eukaryotic in vitro expression system comprises a lysate selected from the group consisting of a lysate lysates of mammalian cells in particular of rabbits, reticulocytes, human tumour cell lines, hamster cell lines, or other vertebrate cells, in particular oocytes, and eggs of fish, eggs of and amphibia, as well as insect cell lines, yeast cells, algal cells, or and extracts of plant seedlings.

13. (Currently Amended) Method The method as claimed in one of the claims 1 to 7, characterized in that claim 1 wherein the expression system is a prokaryotic in vivo expression system is used.

14. (Cancelled)

- 15. (Currently Amended) Method The method as claimed in claim 1314, eharacterized in that wherein the a gram negative prokaryotic expression system host cell, in particular comprises an E. coli cell or a gram positive prokaryotic host cell, in particular a Bacillus subtilis cell-is used.
- 16. (Currently Amended) Method The method as claimed in one of the claims 1 to 7, characterized in that claim 1 wherein the expression system comprises a eukaryotic host cell-is used as an expression system.
- 17. (Currently Amended) Method The method as claimed in claim 16, eharacterized in that wherein the eukaryotic host cell is selected from the group consisting of a yeast cell, an insect cell, or a vertebrate cell, in particular an amphibian cell, a fish cell, a bird cell, and a or mammalian cell, and a vertebrate cell is used.
- 18. (Currently Amended) Method The method as claimed in one of the claims 1 to 7, characterized in that claim 16 wherein the expression system is a non-human eukaryotic host organism is used as the expression system.
- 19. (Currently Amended) Method The method as claimed in one of the claims 1 to 18, characterized in that claim 1 wherein the nucleic acid sequence coding for the protein is provided by a method selected from the group consisting of cloning, recombination or/and amplification.
- 20. (Currently Amended) Method The method as claimed in claim 19₇

 characterized in that wherein the nucleic acid sequence coding for the protein is provided by provision comprises a two-step PCR polymerase chain reaction.

- 21. (Currently Amended) Method The method as claimed in one of the claims 1 to 20, characterized in that claim 1 wherein the nucleic acid sequence coding for the protein to be produced or/and the heterologous nucleic acid sequence comprises at least partially have a codon usage adapted, based on codon usage, to the respective expression system.
- 22. (Currently Amended) Method The method as claimed in one of the claims 1 to 21, characterized in that claim 1 wherein the heterologous nucleic acid sequence comprises contains a section coding sequence for a purification domain or/and a section coding for a proteinase recognition domain.
- 23. (Currently Amended) Reagent A composition for producing a protein, the composition comprising:
- (a) a nucleic acid sequence that is heterologous to the nucleic acid sequence coding for the protein which can be wherein the heterologous nucleic acid sequence is inserted into the protein-coding nucleic acid sequence in the correct reading frame and wherein the heterologous nucleic acid sequence which can form forms a stem-loop structure at a distance of 6-30 nucleotides on from the 3' side of the translation start codon; and
 - (b) an expression system that is suitable for producing the protein.